This invention relates generally to the field of coin collecting machines, and more particularly to an improved form of coin vault, especially adapted for use in any coin-operated equipment particularly for use in conjunction with laundry machines and other devices which are subjected to operate with water, dampness and the like.

It is among the principal objects of the present invention to provide an improved coin vault of the class described which may be mounted directly to the top of an appliance with which the same is used, in such manner that accessibility to the interior may be conveniently accomplished from top and forward walls thereof, whereby a plurality of machines, each equipped with a similar coin vault, may be positioned in close abuttal relationship, thereby utilizing as much available floor space as possible. In addition, this improved coin vault may be mounted to the side wall or concealed within the appliance.

Another object of the invention lies in the provision of an improved coin vault of the class described which may effectively withstand the deleterious effects of water spillage and the like thereupon, over a substantial period of operational life.

Another object of the invention lies in the provision of improved coin vault construction which may be unusually resistant to pilferage and the like.

A further object of the invention lies in the provision of an improved coin vault construction in which access to the timing mechanism by one class of authorized personnel is possible, without the necessity of making accessible the coin collecting mechanism located in a common housing.

Still another object of the invention lies in the provision of an improved coin collecting vault in which the cost of fabrication may be of a reasonably low order, with consequent wide sale, distribution and use.

Yet another object of the invention lies in the provision of an improved coin collecting vault which may be utilized with a wide variety of timer mechanisms with relatively minor modification.

These objects as well as other incidental ends and advantages, will more fully appear in the progress of the following disclosure, and be pointed out in the appended claims.

In the drawings, to which reference will be made in the specification, similar reference characters have been employed to designate corresponding parts throughout the several views.

FIGURE 1 is a view in perspective of an embodiment of the invention.

FIGURE 2 is an enlarged fragmentary longitudinal central sectional view thereof, as seen from the plane 2—2 in FIGURE 1.

FIGURE 3 is a view in perspective of a coin box comprising a part of the embodiment.

FIGURE 4 is a view in perspective of a removable door constituting part of a locking means.

FIGURE 5 is a fragmentary plan view as seen from the plane 5—5 in FIGURE 2.

In accordance with the invention, the device, generally indicated by reference character 10, comprises broadly: an outer casing 11, coin insertion means 14, timing means 15, and a coin collecting element 16.

The outer casing element 11 is preferably formed of welded steel construction, and is of generally rectangular configuration. It includes an upper wall 18, side walls 19 and 20, a lower wall 21, a front end wall 22, and a rear end wall 23.

The upper wall 18 is provided with a rectangular opening 25, there being a frame or jamb of generally channel-shaped cross section 26 disposed immediately beneath the opening 25. The frame 26 includes a generally horizontally disposed portion 27 of substantial area as well as a rabbeted portion 28. Selectively positionable within the opening 25 is a lockable lid member 29, having a tongue 30 mounted on the inner surface thereof, and engageable with the inner surface of the upper wall 18. A resilient gasket 31 is peripherally arranged upon the horizontally disposed portion 27 of the frame 26, and is selectively compressible between the portion 27 and the lid member 29. Lockable threaded means 28, including a removable key portion 33 selectively engages a threaded orifice 27 in a bracket 35 which supports the timing means 15, as will more fully appear hereinafter.

Referring to the lower right hand portion of FIGURE 2, the casing element 11 also includes a short horizontal wall 37, and a short vertical wall 38 defining a recess 39. The vertical wall 38 is provided with an opening 40 of generally rectangular configuration, which is normally closed by a removable door 41 best seen in FIGURE 4.

The door 41 includes a rectangularly shaped outer plate 42, bounded by an inner surface 43, an outer surface 44, and edge surfaces 45, 46, 47 and 48. Secured to the inner surface 43, preferably by welding, is a hollow locking member 49 having rearwardly extending side walls, one of which is indicated by reference character 50, which support a main wall 51 in parallel relation with respect to the outer plate 42. Extending laterally at the main wall 51 is the locking lip 52. Disposed within the hollow recess 53 formed by the side walls 50 is a slidable latch member 54 having a single opening 55, the edges of which cooperate with a pivotally mounted cam member 56 on a shaft 57. The shaft 57 is connected to a lock 58 having an outer housing 59 of non-circular configuration, and disposed within a correspondingly shaped opening in the plate 42. From a consideration of FIGURES 2 and 4, it will be observed, that the door 41 may be installed in such a position that the locking lip 52 projects either upwardly or downwardly, and where the locking lip projects upwardly, and the latch member 54 provides the downward engagement, even drilling the shaft 57 will not automatically release the latch member 54, thus further frustrating the efforts of a thief who has pilfered to this degree.

It will be observed that by placing the opening 40 in the wall 38 which is inwardly disposed with respect to the front end wall 22, the door 41 and its associated locking means are protected from the effects of water which may be accidently spilled upon the device during operation.

The coin insertion unit 12 may be of a well known type including a manually engageable member 60 of generally planar configuration and includes a coin opening 61. The member 60 projects through an opening 62 in the front end wall 22. The inner end 63 of the member 60 directly contacts switch means 64 on the timing means 15, so that the same may be actuated each time the member 60 is moved inwardly to the full extent of its possible path of travel.

The coin rejection means 13 may be of any well known type, including a finger 66 which projects into the coin opening 61 in the absence of a coin, and any other type of well known rejection means (not shown) for detecting the presence of slugs and the like.
The hopper means 14 is disposed beneath the coin insertion means, for the reception of coins therefrom, and is mounted upon an inner casing 70 including an upper wall 71 and an inner wall 72 as well as lower wall 73. The hopper member 14 juxtaposes an opening 75 and the upper wall 71, and includes a rear wall 76, a sloped forward wall 77 and side walls one of which is indicated by reference character 78.

The timing means 15 may be of a well known electric motor type, including a motor 80 secured to a bracket 82 mounted on the inner surface of the outer casing element 11. Where different types of timing means are employed, an additional bracket 83 may also be provided as an alternate mounting means.

The coin collecting element 16 preferably includes a removable coin box 86, the same being disposed within a cavity 87 formed by the walls 71 and 73. As best seen in FIGURE 2 in the drawings, the cavity is generally of rectangular configuration, there being a plurality of supporting rails 88 which serve to position the box 86 when installed. The box 86 may be of a well known type, including a container portion 89 and a lid portion 90 having a coin opening 91 resiliently closed by a sliding member 92. A projection 93 on the member 92 projects upwardly therefrom, and is movable within a curved groove 94 in the lid portion 90. The wall 71 is provided with a slot 91 which engages in projection 93 as the box 86 is positioned, so that the active positioning automatically opens the opening 91. A hasp member 96 engages a projection 97 so that the box may be sealed prior to installation.

It may best be seen that we have invented novel and highly useful improvements in coin vaults, in which there has been provided a secure construction which is not only relatively impervious to the efforts of pilferers, but in which all of the openings to a main outer housing are adequately protected from water and moisture. The upper opening which permits access to the timer mechanism for servicing, is provided with resilient gasket means, as well as threaded locking means which enables adequate compression of the gasket means to prevent the entry of any moisture should water by spilled upon the outer casing. The lower opening, which permits access to a coin collecting box is recessed, so that water spilled upon the outer casing will not enter the mechanism comprising the coin collecting means.

We wish it to be understood that we do not consider the invention limited to the precise details of structure shown and set forth in this specification, for obvious modifications will occur to those skilled in the art to which the invention pertains.

We claim:

1. In a coin vault of the class described, an outer casing having front, rear, upper and lower walls, short horizontal and vertical walls extending inwardly of said front wall to form a recess, said short vertical wall having a generally rectangular opening therein, a lockable door including an outer plate, a hollow locking member mounted upon an inner surface of said outer plate, said locking member including a locking lip projecting therefrom, a slidable latch member disposed within said locking member and selectively projectable therefrom in a direction opposite the location of said lip member, and lockable means projecting through said outer plate for moving said latch member between locking and unlocked positions.

2. In a coin vault of the class described, an outer casing having front, rear, upper and lower walls, short horizontal and vertical walls extending inwardly of said front wall to form a recess, said short vertical wall having a generally rectangular opening therein, a lockable door including an outer plate, a hollow locking member mounted upon an inner surface of said outer plate, said locking member including a locking lip projecting therefrom, a slidable latch member disposed within said locking member and selectively projectable therefrom in a direction opposite the location of said lip member, and lockable cam-actuated means projecting through said outer plate for moving said latch member between locking and unlocked positions said last-mentioned means including a shaft, the axis of which is substantially perpendicular to the plane of said outer plate, a cam member extending radially of said shaft adjacent an inner end thereof, and a key-operated lock disposed on an outer end of said shaft.

References Cited by the Examiner

UNITED STATES PATENTS

949,751 2/10 Broughton 232—15
1,005,652 10/11 Smith 232—15
2,010,877 8/35 Morell 232—1.4

FRANK B. SHERRY, Primary Examiner.